

An overview of the latest OECD Report

Chapter 1. Economic, Environmental, and Social Trends

Driven by technological advances and global integration, the strong economic growth experienced over the last century has been accompanied by gains in material welfare in all parts of the world. World GDP is projected to expand by 75% - in the period 1995-2020, bringing with it increased pressures on environmental and social resources.

Governments pursuing sustainable development face the challenge of discerning how best to balance the challenges and opportunities of growth and to decouple economic growth from environmental pressures. Given the global nature of many of the most pressing development challenges such as climate change it is imperative that countries build strong coalitions to address issues of common concern, and that they adapt institutions and decision making processes to ever-increasing globalization. This chapter provides an overview of some key economic, environmental and social trends important to sustainable development and discusses the challenges they pose for the wellbeing of current and future generations.

Chapter 2. Key Features and Principles

Seeking to link and prioritise among aspirations pertaining to human welfare, the sustainable development perspective stresses the long-term compatibility between the economic, environmental and social dimensions of development, while acknowledging possible competition across these areas in the shorter term. Addressing the objectives of sustainable development necessitates the institutional and technical capacity to assess the economic, environmental, and social implications of development strategies and to formulate and implement appropriate policy responses. This chapter describes the key features and principles of sustainable development, examining the concepts of need, capital, and productivity. It also looks at the role of technological progress, resource substitution, alternate capital valuation, and better provision and pricing mechanisms of public goods in enhancing the productivity of existing assets. With corrected market signals and incentives to modify behaviour in line with sustainability, policy makers can secure more efficient resource use, meaning higher overall welfare and equity today and in the future.

Chapter 3. Measurement

The broadness of the sustainable development agenda, combined with the difficulty of calculating such things as the potential satisfaction of future needs or the future impact of current actions, poses a significant challenge for measurement. The transnational dimension of key threats to sustainability, which renders monitoring difficult, further complicates this problem. Two basic questions inform this discussion: What is meant by needs? And what is required to ensure that these are being met? This chapter attempts to describe the role of measurement in answering these questions, examining various accounting and analytical frameworks used to organise data on sustainable development. In doing so, it addresses the need for an integrated information set on long-term sustainability issues in the formulation and monitoring of policy. The preliminary set of indicators elaborated here should serve as a basis for the further development of measurement frameworks that can adequately account for the multidimensional elements of sustainable development.

Section II. Enhancing Sustainable Development in OECD Countries

Chapter 4. Institutions and Decision Making

An integrated framework of effective institutions is essential for sustainable development. Building this framework requires coherent integration of policies across the economic, social, and environmental spheres; significant participation of civil society in policy making and implementation; co-ordination between national governments and international organisations; and strong political commitment to a long-term perspective. In particular, NGOs play an important role in promoting transparency, efficiency, and co-operation in all phases of the sustainable development agenda (including decision-making, skills training, policy implementation and assessment). Improving relationships between international organisations and developing countries is also crucial for enhancing the legitimacy of sustainable development. The OECD, which possesses expertise in a wide range of policy areas, is uniquely placed to contribute to this process of institutional integration and co-ordination. This chapter addresses institutional challenges from both a domestic and international perspective, examining the role of organisations and the stakeholders who interact with them in implementing the goals of sustainable development.

Chapter 5. Policy Instruments

Bringing together the economic, social and environmental dimensions of sustainable development coherently and efficiently requires establishing appropriate framework conditions and implementation tools. This chapter reviews, in policy-oriented terms, a selection of key framework conditions and the practical tools needed to implement them. It focuses on the principal goals of improving the policy framework through a more effective, transparent and efficient regulatory system as well as correcting market and intervention failures by removing distortionary subsidies, introducing green tax reforms, and creating markets for pollution control and resources management. Common to all of these approaches is the need to realise the interdependent yet complementary nature of policy interventions. Wide stakeholder participation and international co-operation are other critical elements in building a successful policy framework for sustainable development. Finally, these framework conditions will produce results only if implemented with a long-term perspective and strong, continuous political will.

Chapter 6. Technology

Innovation and technology play an increasingly significant role in economic growth. Investment in innovation and technology is rising, with OECD expenditure on research and development (R&D) at more than 2.2% of OECD-wide GDP. In addition, R&D has become more market oriented and research cycles have shortened and become more closely tied to business strategies. Making innovation and technology contribute to sustainability requires internalising the dynamics of innovation-led growth, and integrating sustainability into the economic and research systems. Although the current socio-economic system does not provide sufficient incentives for sustainable innovation and technological change, governments and businesses have begun to adopt innovative public policy and corporate initiatives to diffuse cleaner technologies and enhance environmental performance. Because relevant process and product innovations often encompass networks that extend beyond specific firms and sectors, innovations require a transdisciplinary and intersectoral approach to problem solving. Public policy has an important role to play in this process in addressing market failures and systemic difficulties, as well as promoting integrated R&D.

Chapter 7. Experience in OECD Countries

How do countries succeed in conducting cost-effective and consistent policies pertaining to the environment and natural resource use? By way of response, this chapter provides overviews of a number of special chapters of the OECD Economic Surveys on enhancing environmentally sustainable growth in selected OECD countries, and highlights important themes common to these studies. In particular, it discusses the need for policy co-ordination and the use of economic instruments, describing some specific mechanisms that countries have put in place to improve these, including cost-benefit analysis. It then examines the use of economic instruments, namely taxes and tradable permits, highlighting areas where their use could be extended or improved, along with ways of removing barriers to their implementation.

Section III. Globalisation and Sustainable Development

Chapter 8. International Trade and Investment

Trade and international investment stimulate competition, improve resource allocation, and facilitate the international distribution of technology. They also contribute to alleviating poverty and can directly enhance environmental protection as well as indirectly promote demand for better quality of ambient air, water and other media. Liberalisation of trade and international investment has been a major contributor to economic growth and hence one of the cornerstone policies in promoting sustainable development. Yet despite gains made over the last decade, there is still much room for strengthening sustainable policies and practices at the national and international level. Further progress can be achieved through greater policy coherence, fuller use of market-based economic instruments, removal of barriers to international trade and investment, more accurate assessment of social and environmental impact of trade policy, and increased corporate responsibility.

Chapter 9. Strategies for Non-member Countries

Developing countries, with 80% of the world's population, will assume a central role in ensuring sustainable development in the 21st century. What occurs in developing countries will have a significant bearing on critical issues like preserving global peace and political stability and maintaining the viability of global commons, notably the earth's atmosphere and biological resources. In addition, growing global economic interdependence means that the socio-economic prospects of OECD countries will be ever more tightly linked to that of developing and transition countries. Non-member countries will play a critical role in expanding the global economy, combating poverty and achieving sustainable environmental and population balances. Although facing such issues as rapid population growth, food security and desertification, as well as destabilising health trends like the spread HIV/AIDS, non-member countries must seize the opportunities brought by globalisation, (for increased trade and investment linkages, more efficient resource use, and the transfer of capital, technology), and find sustainable means for dealing with its challenges. Central to the success of developing countries is the establishment of strong policy frameworks to help attract trade and investment and ensure that these flows benefit society. For many countries achieving these goals will require external assistance.

Section IV. Cross-sectoral Issues

Chapter 10. Natural Resource Management

Natural resources are those parts of the earth's biological and mineral endowments from which societies, directly or indirectly, derive value. Improved productivity, technological developments,

new sources of supply, availability of substitutes and increased efficiency in resource-using production processes have contributed to maintaining the natural resource base. Many ecosystems are nonetheless under stress. Despite the virtual absence of evidence indicating overall scarcity in the supply of natural resources, optimising the rate at which local resources are depleted and minimising resource degradation are important issues. This chapter discusses natural resource management in OECD countries as well as some of the policy challenges related to natural resource management, including ownership and access rights, resource degradation, and the provision of ecosystem services. Making the generally positive trends in the economic efficiency of natural resource use fully sustainable will require removing market distortions such as subsidies and price controls.

Chapter 11. Climate Change

Global climate change will challenge sustainable development in the 21st century. Recent evidence indicates that human-induced global warming is already occurring. In particular, changes in atmospheric temperature, sea levels, and precipitation patterns will impact the natural environment, agricultural activities, human settlement and health. Climate change is inter-linked with other global, national and local environmental problems and development challenges such as loss of biodiversity, deforestation, stratospheric ozone loss, desertification and freshwater degradation. Long time horizons and the uncertainty surrounding possible climate futures also add to the dilemma facing politicians and policy-makers, as governments are asked to provide leadership and take action that incurs costs today to reap global benefits for future generations. Inaction risks imposing significant costs on future generations and possibly widening future economic disparities among developed and developing regions of the world. The central challenge in dealing with climate change is to set objectives and design climate change policies to properly balance social benefits and costs, in the context of equity concerns and real-world constraints. Particular attention must be given to the developing countries that are most vulnerable to climate change because of weak institutions and severely limited access to financial resources, technology, and scientific expertise.

Section V. Sectoral and Territorial Approaches

Chapter 12. Energy

In the face of increasing global demand for energy and pressures on the global environment, policy makers have acknowledged that the choice is no longer whether to participate or not in discussions about sustainable development but rather how. Energy remains a strategic commodity, as energy and the services it provides remain necessary to fuel economic growth and social development. At national and sub-national levels, governments face the challenge of assuring sufficient energy for economic activities and universal access to energy services to support the provision of housing, food, and health and educational facilities. And governments must do so while avoiding direct ownership and micro-management of energy operations that can diminish efficiency as well as co-ordination failures that have detrimental environmental impacts. At the global level, governments need to develop policies to address the projected 60% increase in the predominantly fossil-fuel based global energy demand over the next 20 years, and also take action to modify longer-term trends in greenhouse gas emissions. In formulating policies and initiatives, governments must, moreover, take into account that the energy demand of non-OECD countries will soon surpass that of OECD countries, and that already high levels of energy demand in developed countries will continue their upward trend. Overall, energy supply needs to be further

decarbonised and diversified and the energy intensity of economic growth reduced. The principal challenge for energy policy makers is to establish framework conditions that promote well-functioning markets and incentives to diversify energy use and investment in research and development.

Chapter 13. Transport

Transport makes a fundamental contribution to a prosperous economy. The transport sector provides substantial benefits to users but there is concern about the impacts of current and future transport operations. Significant improvement can be achieved in the short to medium term in the environmental performance of current transport arrangements. However, demand for transport is projected to increase as a result of increased trade and tourism, as well as population and economic growth over the period to 2020 and beyond. Demand increases are likely to more than offset the gains that can be expected from improvements in transport and vehicle technology in relation to some environmental impacts. Governments, industry and communities must act to ensure transport becomes more – not less – sustainable. Governments need to take the lead in addressing sustainability concerns and catalyse actions involving other parties. Industry and communities have critical roles to play in ensuring that transport contributes fully, along with other sectors, to sustainable development outcomes.

Chapter 14. Agriculture

Collectively, the agricultural sectors of OECD countries have managed to achieve unprecedented growth in the output of food and non-food commodities since the middle of the 20th century. This growth has been achieved with fewer workers and on slightly less land, but using more water, chemicals and machinery. However, agricultural growth has often been accompanied by increased levels of pollution, as well as by greater homogenisation of the landscape and destruction of wildlife habitat. Agriculture and the ecosystems in which it forms a part control or interact with a large number of natural capital stocks of value not only to the agricultural sector but to the rest of society as well; therefore the way in which the agricultural sector manages these stocks is crucial to sustainable development. Proper market signals, policies, and management can enhance agriculture's positive contributions to the overall welfare of society, while reducing its negative impact. Whereas the risks of delaying reforms can only grow as pressures on agriculture increase in line with rising populations and competition for other uses of the resources on which agriculture depends. This chapter explores those concerns, along with the key requirements for achieving increased agricultural output in a sustainable way, including the implementation of appropriate policies in tandem with markets, and the adoption of best practices by farmers.

Chapter 15. Manufacturing

Over the past two decades, the manufacturing sector in OECD countries has made considerable progress in reducing its impact on the environment. These gains have come primarily from plant modernisations, product mix changes, pollution prevention and control measures, as well as from changes in the sectoral composition of manufacturing. OECD industries are now more proactive in addressing sustainable development concerns, a trend that can be reinforced through government policies and efforts to enhance eco-efficiency among businesses. On the part of industry, environmental management systems that include adequate reporting mechanisms are essential to the development of more sustainable practices. Well-designed environmental, policy packages,

when combined with technology and innovation policy, also provide crucial tools for achieving further progress.

Chapter 16. Territorial Development

The territorial organisation of economies and societies is today undergoing dramatic change. Globalisation, technological innovation, sectoral adjustment, migration, and population ageing make it increasingly difficult to predict the future of places. This chapter considers why and how territorial policy can contribute to the goals of sustainable development. Chief among objectives of territorial development policies are the reduction of disparities, the promotion of conditions favourable to endogenous development, and a better balance between urban and rural area. Unsustainable patterns can result from ignoring large differences among territories which national trends often conceal. Many of the problems related to sustainable development should also be identified and analysed at local and regional levels since this is the level most conducive to setting priorities and designing effective, publicly supported solutions. In other words, progress toward sustainability will require change in the organisation of cities and regions, in the management of their natural resources, including their demand for energy and in land-use patterns.

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